Tetradesmus lagerheimii var. tetradesmoides

(Smith) Taşkin & Alp 2019

Most likely ID: n.a.

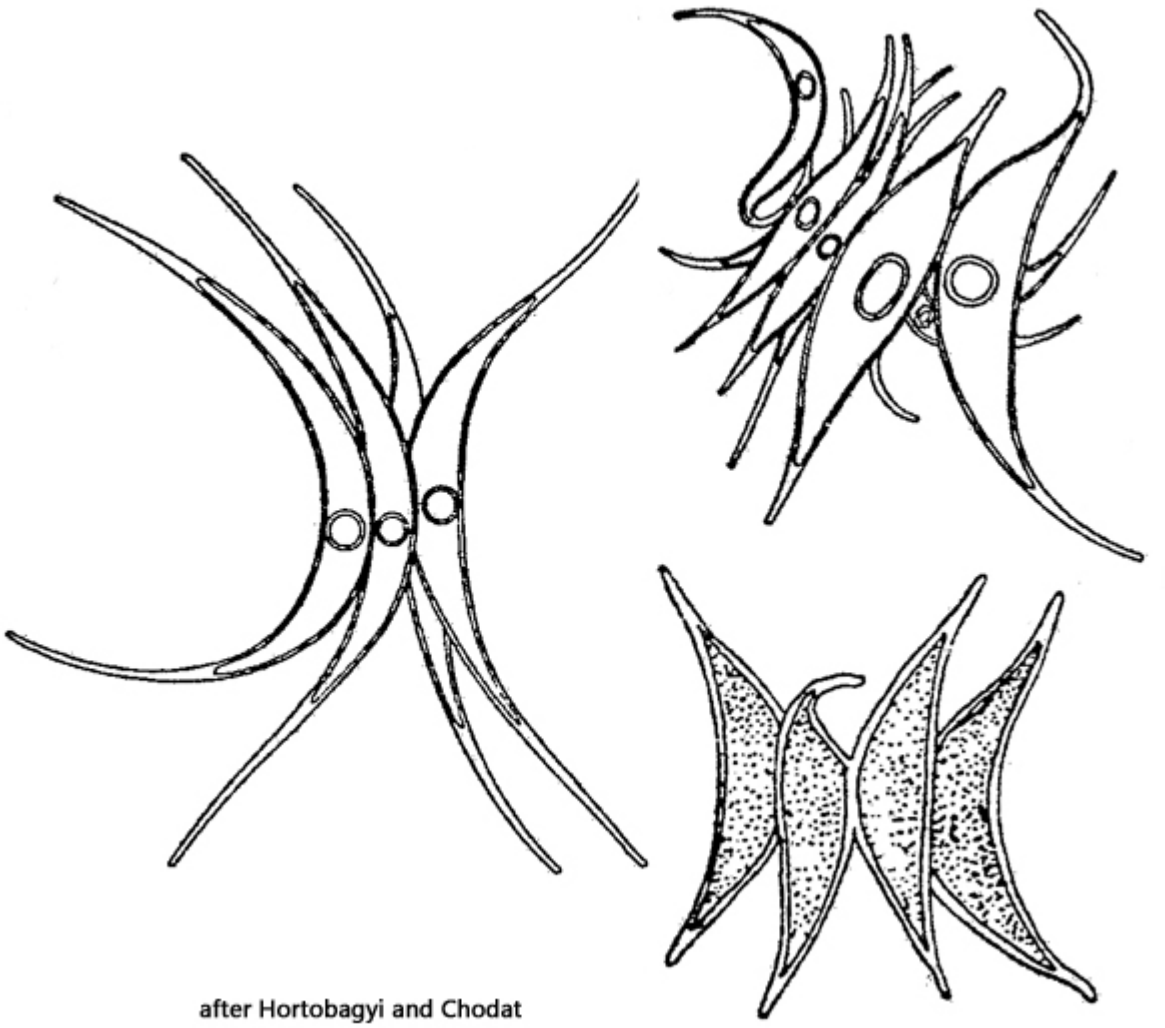
Synonym: *Scenedesmus acuminatus var. tetradesmoides*

Sampling location: Pond of the waste disposal company Constance

Phylogenetic tree: *Tetradesmus lagerheimii var. tetradesmoides*

Diagnosis:

- irregular coenobia of 2–8 cells
- cells 9.6–23 µm long, width 2–3 µm
- cells touch each other with convex sides
- inner cells asymmetrical spindle-shaped with gradually tapered and rounded ends
- tapered “arms” of the cells sometimes S-shaped
- tapered ends of the cells are hyaline
- cell surfaces smooth
- one pyrenoid per cell
- planktonic lifestyle



Tetradesmus lagerheimii var. tetradesmoides

I found *Tetradesmus lagerheimii var. tetradesmoides* in September 2022 in the plankton of the pond of the waste disposal company Constance. The species was present in large numbers in the samples. All coenobia were clustered in irregular aggregates, which were possibly united in a common gelatinous sheath. However, I could not recognize any gelatinous sheath in DIC. These aggregates had an average diameter of 50 µm. Characteristic for *Tetradesmus lagerheimii var. tetradesmoides* are the irregular coenobia, which can consist of cells of different sizes, which are sometimes arranged twisted against each other. The tapered ends of the cells are long and in some cells bent in a S-shape.

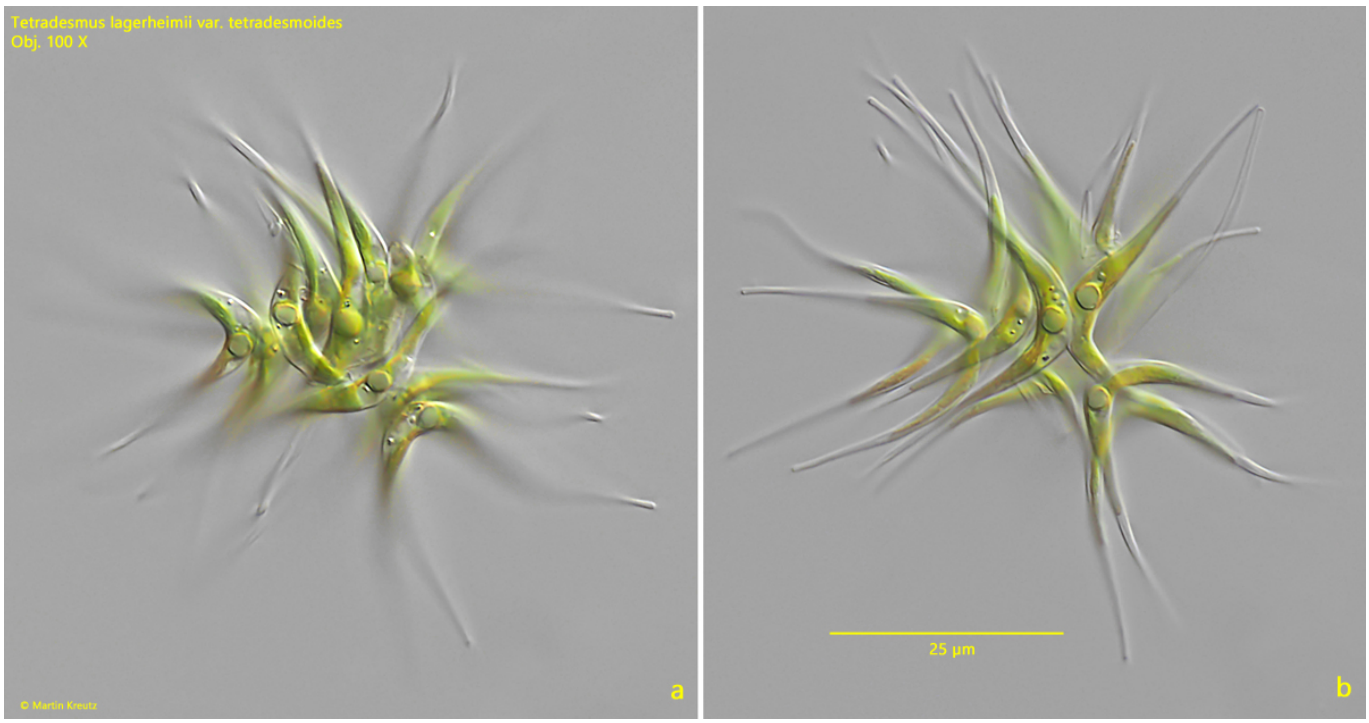


Fig. 1 a-b: *Tetradesmus lagerheimii var. tetradesmoides*. D = ~50 µm (of pseudocolony). Two focal planes of a agglomerate of several coenobia in a pseudocolony. Obj. 100 X.

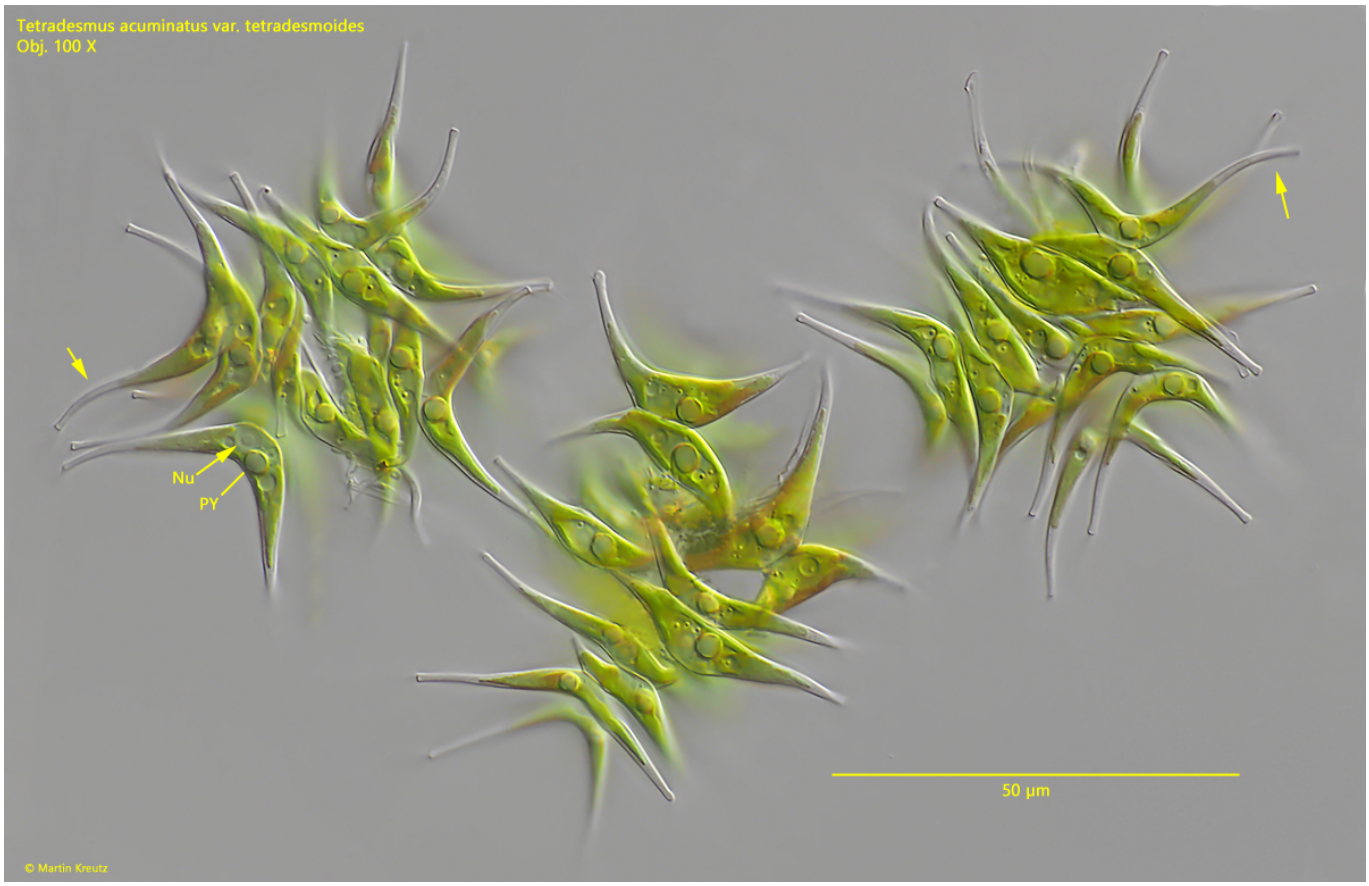


Fig. 2: *Tetradesmus lagerheimii var. tetradesmoides*. Three slightly squashed pseudocolonies. Note the backward bent “arms” (arrows), what gives them a slight

S-shape. Nu = nucleus, PY = pyrenoid. Obj. 100 X.